

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings of claims in the application:

Claim 1 (currently amended): A transgenic mouse whose genome comprises a nucleotide sequence encoding human CD20; wherein human CD20 is expressed on the surface of a B lymphocyte and/or pre-B cell.

Claim 2 (currently amended): The transgenic mouse of claim 1 wherein said nucleotide sequence is operably linked to a human CD20 endogenous promoter.

Claim 3 (currently amended): The transgenic mouse of claim 2 wherein whose cells express human CD20 is expressed on the surface of a pre-B cell.

Claim 4 (previously presented): The transgenic mouse of claim 3 wherein human CD20 is expressed on the surface of B lymphocytes.

Claim 5 (previously presented): The transgenic mouse of claim 3 wherein human CD20 is expressed on the B lymphocytes at a level sufficient for anti-human CD20 antibody bound to the expressing cells to affect killing of the cells, resulting in B cell depletion.

Claim 6 (previously presented): The transgenic mouse of claim 1 wherein the genome of said mouse contains a disruption in an endogenous gene encoding a CD20 molecule substantially homologous to human CD20.

Claim 7 (canceled)

Claim 8 (previously presented): A method of identifying an agent capable of treating a B cell lymphoma said method comprising: a) measuring the number of B lymphocytes and/or pre-B cells expressing human CD20 in a mouse of claim 1; b) administering said agent to the mouse of claim 1; and c) measuring the number of B lymphocytes and/or pre-B cells expressing human CD20

in the mouse; wherein a decrease in the number of B lymphocytes and/or pre-B cells expressing human CD20 in the mouse after treatment with the agent identifies the agent capable of treating a B cell lymphoma.

Claim 9 (canceled)

Claim 10 (previously presented): A method of identifying an agent capable of depleting or killing B lymphocytes and/or pre-B cells expressing human CD20 said method comprising: a) measuring the number of B lymphocytes and/or pre-B cells expressing human CD20 in a mouse of claim 1; b) administering said agent to the mouse of claim 1; and c) measuring the number of B lymphocytes and/or pre-B cells expressing human CD20 in the mouse; wherein a decrease in the number of B lymphocytes and/or pre-B cells expressing human CD20 in the mouse identifies the agent as capable of depleting or killing B lymphocytes and/or pre-B cells expressing CD20.

Claim 11 (currently amended): The method of claim 10 wherein said B lymphocytes and/or pre-B cells are cancer cells.

Claim 12 (canceled)

Claim 13 (previously presented): A cell or tissue derived from the transgenic mouse of claim 1.

Claim 14 (canceled)

Claim 15 (canceled)

Claim 16 (previously presented): A method of testing safety of anti-human CD20 therapy, said method comprising: monitoring a mouse of claim 1 that has been administered an agent capable of depleting or killing B lymphocytes and/or pre-B cells expressing CD20 for short or long term adverse effects.

Claim 17 (previously presented): A method of testing efficacy of anti-human CD20 therapy, said method comprising: determining at least one dose of an agent that results in the most B cell depletion in a set of mice of claim 1 that have each been administered a different dose of the agent; wherein the amount of B cell depletion is determined by measuring the number of B lymphocytes and/or pre-B cells expressing human CD20 in the set of mice of claim 1.

Claim 18 (canceled)

Claim 19 (previously presented): The transgenic mouse of claim 1 wherein said nucleotide sequence is operably linked to a murine CD20 promoter.

Claim 20 (previously presented): The method of claim 8 wherein the number of B lymphocytes is measured.

Claim 21 (previously presented): The method of claim 10 wherein the number of B lymphocytes is measured.

Claim 22 (previously presented): The method of claim 16 wherein the agent decreases the number of B lymphocytes.

Claim 23 (previously presented): The method of claim 17 wherein the number of B lymphocytes is measured.

Claim 24 (previously presented): A method of identifying an agent capable of treating a B cell lymphoma said method comprising comparing the number of B lymphocytes and/or pre-B cells expressing human CD20 in a mouse of claim 1 after administering an agent to the mouse to the number of B lymphocytes and/or pre-B cells expressing human CD20 in the mouse before administration of the agent, wherein a decrease in the number of B lymphocytes and/or pre-B cells expression human CD20 in the mouse after administration of the agent compared to the number of B lymphocytes and/or pre-B cells expressing human CD20 in the mouse before administration of the agent identifies the agent capable of treating a B cell lymphoma.

Claim 25 (previously presented): The method of claim 24 wherein the number of B lymphocytes is measured.

Claim 26 (previously presented): A method of identifying an agent capable of depleting or killing B lymphocytes and/or pre-B cells expressing human CD20 said method comprising comparing the number of B lymphocytes and/or pre-B cells expressing human CD20 in a mouse of claim 1 after administering an agent to the mouse to the number of B lymphocytes and/or pre-B cells expressing human CD20 in the mouse before administration of the agent, wherein a decrease in the number of B lymphocytes and/or pre-B cells expression human CD20 in the mouse after administration of the agent compared to the number of B lymphocytes and/or pre-B cells expressing human CD20 in the mouse before administration of the agent identifies the agent capable of depleting or killing B lymphocytes and/or pre-B cells expressing CD20.

Claim 27 (previously presented): The method of claim 26 wherein said cells are cancer cells.

Claim 28 (previously presented): The method of claim 26 wherein the number of B lymphocytes is measured.